```
4873566.pn. or 4897711.pn. or 5052009.pn. or 5089861.pn. or
BRS L4
             17
5748658.pn. or "5763888" 5812717.pn. or 5835514.pn. or 6081638.pn. or 6194789.pn. or
6205274.pn. or 6275513.pn. or 6521989.pn. or 6588949.pn.
                                                             USPAT
      2004/04/05 12:47
      L5
                    4 and window USPAT
                                               2004/04/05 13:31
BRS
             7
      0
      L6
                    5574814.pn. USPAT; US-PGPUB 2004/04/05 14:49
BRS
      0
BRS
      L7
             23
                    5574814.URPN.
                                        USPAT
                                                      2004/04/05 13:31
      L8
                    alles.in. and laser
                                        USPAT; US-PGPUB 2004/04/05 14:51
BRS
             5
             0
BRS L9
             282
                    (laser with package) and hermetic$8 and window$6 USPAT; US-
PGPUB
             2004/04/05 14:52
                                                                           0
BRS
      903
             VCSEL
                           USPAT
                                        2003/02/07 14:27
BRS
      210
             VCSEL not semiconductor
                                        USPAT
                                                      2002/09/14 17:19
      0
BRS
      130
             ((integrated adj1 circuit) with IC) and 385/$.ccls.
                                                             USPAT
      2002/09/14 17:21
                                        0
BRS
             5631988.pn. USPAT
                                        2003/02/07 14:31
      1
             (window or plate) and 385/92.ccls. USPAT
BRS
      317
                                                             2003/02/07 14:33
BRS
      630
             385/92.ccls.
                          USPAT
                                        2003/02/07 14:32
             ((window or plate) with (VCSEL or chip)) and 385/92.ccls. USPAT
BRS
      39
      2003/02/07 14:45
             (((window or plate) with (VCSEL or chip)) and 385/92.ccls.) and
BRS
      25
                                                                           0
(hermetic$9 or seal$6)
                           USPAT
                                        2003/02/07 14:36
             ((window or plate) with (VCSEL or chip$6)) and 385/92.ccls.
BRS
      39
      USPAT
                    2003/02/07 14:40
             ((window or plate or port) with (VCSEL or chip)) and 385/92.ccls.
BRS
      46
                    2003/02/07 20:13
      USPAT
             ((window or plate or port) with (VCSEL or chip)) and 385/92.ccls. and
BRS
((window or plate or port) with (conduct$6 or trace))
                                                      USPAT
                                                                    2003/02/07
20:08
                    0
BRS
     4116 ((window or plate or port) with (VCSEL or chip)) and ((window or plate
or port) with (conduct$6 or trace)) USPAT
                                               2003/02/07 20:09
      907
             (((window or plate or port) with (VCSEL or chip)) and ((window or plate
BRS
or port) with (conduct$6 or trace))) and optic$6
                                               USPAT
                                                             2003/02/07 20:11
             ((((window or plate or port) with (VCSEL or chip)) and ((window or plate
or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) USPAT
      2003/02/07 20:12
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(((((window or plate or port) with (VCSEL or chip)) and ((window or
BRS
      41
plate or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) ) and
                           2003/02/07 20:12
385/$.ccls.
             USPAT
             ((((((window or plate or port) with (VCSEL or chip)) and ((window or
BRS
      32
plate or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) ) and
385/$.ccls.) not (((window or plate or port) with (VCSEL or chip)) and 385/92.ccls.)
      USPAT
                    2003/02/08 23:47
                                               2003/07/26 13:57
BRS
      15
             5574814.URPN.
                                 USPAT
      0
BRS
      3
             5574814.URPN. and (window or sapphire) USPAT
                                                                   2003/02/08
17:14
BRS
             VCSEL same (window near2 lens)
                                              USPAT
                                                            2003/02/08 17:37
      4
             VCSEL and (window near2 lens)
                                               USPAT
                                                            2003/02/08 18:05
BRS
      12
BRS
      8
             (VCSEL and (window near2 lens)) not (VCSEL same (window near2
lens)) USPAT
                    2003/02/08 17:38
                                               2003/02/08 17:54
BRS
             5625189.URPN.
                                 USPAT
      8
      0
BRS
      3
             6114700.URPN.
                                 USPAT
                                               2003/02/08 18:00
BRS
      39
             VCSEL and (window with lens)
                                               USPAT
                                                            2003/02/08 18:05
             VCSEL same (window with lens)
BRS
      14
                                               USPAT
                                                            2003/02/08 18:06
             (VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
      10
lens)) not (VCSEL and (window near2 lens))
                                               USPAT
                                                            2003/10/24 17:37
BRS
      7
             6056448.URPN.
                                 USPAT
                                               2003/02/08 18:08
      0
BRS
      6
             6318909.URPN.
                                 USPAT
                                               2003/02/08 18:30
BRS
      6
             5821571.URPN.
                                 USPAT
                                               2003/02/08 18:51
             ((VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
lens)) not (VCSEL and (window near2 lens))) and (hermet$9 or seal$3)
      2003/02/08 19:29
             (((VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
lens)) not (VCSEL and (window near2 lens))) and (hermet$9 or seal$3)) and sapphire
      USPAT
                    2003/02/08 19:36
             (mold$6 or press$6) with sapphire with glass
BRS
      79
                                                           USPAT
      2003/02/08 22:34
      42
             quartz adj1 epoxy
                                 USPAT
                                               2003/02/08 23:01
BRS
      0
      12
BRS
             (quartz near1 quartz) with window
                                               USPAT
                                                            2003/02/08 23:02
```

BRS	219	(quartz near1 sapphire) with window USPAT 0	2003/0	02/08 23:02	
BRS	75 USPA	75 ((quartz near1 sapphire) with window) and (fiber with optic\$6) USPAT 2003/02/08 23:19 0			
BRS	0 2003/0	trace with window with metal\$9 with external\$6 02/08 23:21	USPA	Т	
BRS	19	trace with window with external\$6 USPAT	2003/0	02/08 23:21	
BRS 23:48	1	5574814.pn. and (window with solder) USF	'AT	2003/02/08	
BRS 23:53	1	5574814.pn. and (window same solder) USF	PΑT	2003/02/08	
BRS	312	hermetic\$9 and (window with adhes\$6) USF	'AT	2003/02/08	
23:55 BRS	44	(hermetic\$9 and (window with adhes\$6)) and (op	tic\$6 witl	h fiber)	
	USPA				
BRS	18 0	5574814.URPN. USPAT 2003/07/26	16:49		
BRS 16:27	1	5636298.pn. and (window same trac\$6) USF 0	'AT	2003/07/26	
BRS	3	VCSEL with hermet\$9 USPAT 200	3/07/26 15	5:48	
BRS	1	5939773.pn. USPAT 2003/07/26 15:49		0	
BRS	3	5939773.URPN. USPAT 2003/07/26	15.40	V	
	0				
BRS	30	(window with trac\$6) with solder\$6 USPAT 0	2003/0	07/26 16:28	
BRS	10 2003/0	((window with trac\$6) with solder\$6) and optic\$07/26 16:28	6 USPA	T	
BRS 17:29	1	5574814.PN. and ("116" same "131") USI	PAT	2003/07/26	
BRS	0 2003/0	5574814.PN. and ("116" same "131" same "130" 07/26 16:52	) USPA	T	
BRS	1	5574814.PN. and ("116" same "131") and "130" 07/27 10:40 0	USPA	T	
BRS	1 0	"19527026" with DE USPAT 2003/07/27	10:42		
BRS	1 0	"19527026" and optic\$6 USPAT 200	3/07/27 1	1:09	
BRS	109 0	Haruhiko.in. and fujitsu USPAT 200	3/07/27 1	1:12	
BRS	20	(Haruhiko.in. and fujitsu) and tabuchi USI	PAT	2003/07/27	
11:11 BRS	33 0	tabuchi.in. and fujitsu USPAT 2003/07/27	11:24		

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BRS	0	tabuchi.in. and	d "07134223"	USPAT	2003/07/27 1	1:25
	0					
BRS	0	tabuchi.in. and	d "7134223"	USPAT	2003/07/27 1	1:26
222	0		1 40 50 500 650	LICDAE	0000/05/05 1	. 05
BRS	0	tabuchi.in. and	d "05279967"	USPAT	2003/07/27 1	1:25
DDC	0	#050 <b>7</b> 006 <b>7</b> #	TIOD A TO	2002/07/27 1:	1.20	0
BRS	1	"05279967"	USPAT	2003/07/27 13		0
BRS	0	"7134223"	USPAT	2003/07/27 13		0
BRS	0		USPAT	2003/07/27 1	1:28	0
BRS	0	"07134223"	JPO 2003/0			0
BRS	0	"7134223"		07/27 11:30		0
BRS	1	"05279967"	JPO 2003/0	07/27 11:30		0
BRS	1	"05279967"	DERWENT	2003/07/27 13	1:30	0
BRS	0	"7134223"	DERWENT	2003/07/27 13	1:30	0
BRS	0	"07134223"	DERWENT	2003/07/27 13	1:31	0
BRS	132	\$6"134223"	<b>DERWENT</b>	2003/07/27 13	1:31	0
BRS	7	\$6"134223" a	nd optic\$6	DERWENT	2003/07/27 1	1:35
	0					
BRS	0	tabuchi and 23	3-05-95 USPA	T: JPO: DERW	VENT 2003/0	07/27 11:36
		0		-,		
BRS	0	haruhiko and	23-05-95	USPAT: JPO:	; DERWENT	2003/07/27
11:36	v	0		001111,010;	, 2210, 21, 1	2000/01/21
BRS	0		0-11-93 USPA	T. IPO. DERW	VENT 2003/0	07/27 11:36
DIND	V	0	0 11 95 05171	1, 31 O, DEICV	VEIVI 2005/	7/12/ 11.50
BRS	0	haruhiko and	10-11-93	USPAT; JPO:	DERWENT	2003/07/27
11:36		0		,	•	
BRS	0	haruhiko and	"10-11-93"	USPAT: JPO:	DERWENT	2003/07/27
11:37	J	0		001111,010,	,	
BRS	78		h tabuchi) and	semiconductor	LISPAT: IPO	DERWENT
DITO		07/27 11:40	ir tao ao in j	0	001111,010	BERTIE
BRS	0		th tabuchi) and	-	and go2h	USPAT; JPO;
	VENT	• • •	1:40		. •	051711, 31 0,
BRS			th tabuchi) and			USPAT; JPO;
	VENT	* *	,	0	) and gozo	OSIAI, II O,
BRS	0		h tabuchi) and	•	T; JPO; DERV	JENT
DV2		(11a1uii1ko witi )7/27 11:41	ii tabuciii) aiid j	g020 USFA 0	I, JPO, DERV	V EIN I
DDC			المحمد (أحام برمامة م	ū	T. IDO. DEDU	IENIT
BRS	0	•	h tabuchi) and	guzb USPA	T; JPO; DERV	VEN 1
DDC		07/27 11:41	- 001. TIOD A	U T. IDO. DEDM	TENTE 2002/	07/07 11.57
BRS	.17	` ′	g02b USPA	I; JPO; DEKW	VENT 2003/0	0//2/ 11:5/
DDC	2	0	TIODAT: IDO	יייי אידע מייי	2002/07/27 1/	2.00
BRS	2	"19527026"	USPAT; JPO;	DEKWENI	2003/07/27 12	2:00
מת	0	5005000	TIOD A T	2002/07/27 2	0.50	^
BRS	1	-	USPAT	2003/07/27 20		0
BRS	202	Sasaoka.in.	USPAT	2003/07/27 20		0
BRS	54	Sasaoka.in. ar	nd sumitomo	USPAT	2003/07/27 20	0:53
	0					

BRS	0	(Sasaoka.in. and sumitomo) and hidemoto USPAT 2003/07/27
20:54		0
BRS	0	(Sasaoka.in. and sumitomo) and \$6"335648" USPAT 2003/07/27
20:55	-	0
BRS	21	(Sasaoka.in. and sumitomo) and "1550" USPAT 2003/07/28
07:04		0
BRS	1	6181858.pn. USPAT 2003/07/28 07:23 0
BRS	1	6181858.pn. and (single with mode) USPAT 2003/07/28 08:50
	_	0
BRS	3	10-246830 USPAT; JPO; DERWENT 2003/07/28 08:51
	0	20 2 1000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BRS	61	(VCSEL same (window with lens)) not (VCSEL same (window near2
-		CSEL and (window near2 lens)) USPAT; US-PGPUB 2003/10/24
17:31	1101 ( 1 0	0
BRS	11	(VCSEL same (window with lens)) not (VCSEL same (window near2
		CSEL and (window near2 lens))  USPAT  2003/10/24 17:31
	1101 ( V C	
BRS	11	(VCSEL same (window with lens)) not (VCSEL same (window near2
=		CSEL and (window near2 lens))  USPAT  2003/10/24 17:32
iens))	not (vc	
DDC	11	(VCSEL same (window with lone)) not (VCSEL same (window near)
BRS	11	(VCSEL same (window with lens)) not (VCSEL same (window near2
iens))	not (VC	CSEL and (window near2 lens)) USPAT 2003/10/24 17:33
DDC	10	(VOSEL (indoid-lane)) and (VOSEL come (raindon) more)
BRS	13	(VCSEL same (window with lens)) not (VCSEL same (window near2 2003/10/24 17:37 0
lens))	USPA	
BRS	20	(VCSEL same (window with lens)) USPAT 2003/10/24 18:15
DDG	1.6	0
BRS	16	4873566.pn. or 4897711.pn. or 5052009.pn. or 5089861.pn. or
		or "5763888" 5812717.pn. or 5835514.pn. or 6081638.pn. or 6194789.pn. or
	74.pn. o	or 6275513.pn. or 6521989.pn. or 6588949.pn.USPAT 2004/04/05
12:47		0
BRS	14	4873566.pn. or 4897711.pn. or 5052009.pn. or 5089861.pn. or
	•	or 5763888.pn. or 5812717.pn. or 5835514.pn. or 6081638.pn. or
61947	_	or 6205274.pn. or 6275513.pn. or 6521989.pn. or 6588949.pn.
	USPA	
BRS	182	(bump with bond\$6) same (sapph\$8 or window\$4) USPAT
	2003/	12/03 21:26 0
BRS	51	(bump with bond\$6) with (sapph\$8 or window\$4) USPAT
	2003/	12/04 11:47 0
BRS	1	6603209.pn. and (solder\$6 near2 bump\$4) USPAT 2003/12/04
09:30		0
BRS	3	(bump with bond\$6) with (sapph\$8 or window\$4) and 385/\$.ccls.
	USPA	
BRS	12	((bump with bond\$6) with (sapph\$8 or window\$4)) and housing
	USPA	* 1

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257/\$6.ccls. and window and (photonic or optoelectronic or "opto-BRS 502 2003/12/04 15:32 electronic") **USPAT** 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-BRS 36 electronic") and 385/\$.ccls. USPAT 2003/12/04 13:41 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-BRS 20 2003/12/04 15:06 electronic") and (window near2 lens\$3) **USPAT** 0 **BRS** 35 257/\$6.ccls. and window and (photonic or optoelectronic or "optoelectronic")and VCSEL **USPAT** 2003/12/04 15:32 0 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-**BRS** 53 USPAT; US-PGPUB 2003/12/04 15:32 electronic")and VCSEL 0 BRS 4 mooney.xa. and 310/\$.ccls. USPAT; JPO; DERWENT 2004/03/31 15:52